

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Presently Amended) A reformer controlling apparatus, comprising:
a reformer having a catalyst unit including a catalyst promoting a steam reforming reaction and a catalyst for promoting a partial oxidation reaction;
a raw fuel gas supplier supplying raw fuel gas containing hydrocarbon and steam to said catalyst unit;
an oxidation gas supplier supplying oxidation gas containing oxygen to said catalyst unit;
a first reaction state detector detecting a state of a reaction progressing at an upstream portion of flows of said raw fuel gas and said oxidation gas in said catalyst unit;
a second reaction state detector detecting a state of a reaction in the whole of the catalysts in said catalyst unit;
a first corrector correcting feed amounts of said raw fuel gas and said oxidation gas, which are supplied to said catalyst unit, based on said state of the reaction detected by said second reaction state detector; and
a second corrector correcting at least one of the feed amount of said oxidation gas, which is supplied to said catalyst unit and ~~for~~ a feed timing thereof, based on said state of the reaction detected by said first reaction state detector and an amount of said oxidation gas corrected by said first corrector.

2. (Presently Amended) The reformer controlling apparatus according to claim 1, further comprising:
third reaction state detectors; and
a detection signal switcher,
wherein said first reaction state ~~detectors~~ detector and said third reaction state detectors are set in plural positions, and a said detection signal switcher ~~is provided,~~
~~which~~ switches, with passage of time, a detection signal supplied to said second

corrector among detection signals indicating said reaction state detected by said first reaction state detector and said third reaction state detectors.

3. (Original) The reformer controlling apparatus according to claim 1, wherein said first reaction state detector detects a temperature state as said reaction state.

4. (Cancelled)

5. (Presently Amended) The reformer controlling apparatus according to claim 1, further comprising:

third reaction state detectors; and

a maximum temperature selector,

wherein said first reaction state ~~detectors~~ detector and said third reaction state detectors for detecting a temperature state are set in plural positions, and said a maximum temperature selector ~~for selecting~~ selects the highest temperature among detected temperatures output from the first reaction state ~~detectors~~ is provided detector and said third reaction state detectors, and said second corrector uses an output of the maximum temperature selector.

6. (Original) The reformer controlling apparatus according to claim 1, wherein said second reaction state detector detects a temperature state as said reaction state.

7. (Presently Amended) A reformer controlling apparatus, comprising:
~~a reformer~~ reforming means having a catalyst unit including a catalyst for promoting a steam reforming reaction and a catalyst for promoting a partial oxidation reaction;

raw fuel gas supplying means for supplying raw fuel gas containing hydrocarbon and steam to said catalyst unit;

oxidation gas supplying means for supplying oxidation gas containing oxygen to said catalyst unit;

first reaction state detecting means for detecting a state of a reaction progressing at an upstream portion of flows of said raw fuel gas and said oxidation gas in said catalyst unit;

second reaction state detecting means for detecting a state of a reaction in the whole of the catalysts in said catalyst unit;

M first correcting means for correcting feed amounts of said raw fuel gas and said oxidation gas, which are supplied to said catalyst unit, based on said state of the reaction detected by said second reaction state detector means; and

second correcting means for correcting at least one of the feed amount of said oxidation gas, which is supplied to said catalyst unit and/or a feed timing thereof, based on said state of the reaction detected by said first reaction state detecting means and said oxidation gas corrected by said first correcting means.

8. (Withdrawn)
